MOSER PATTERSON SHERIDA

PTO

**2**005

USSN 09/540,178 Page 2

## IN THE SPECIFICATION

Please replace the paragraphs below with the amended paragraphs as follows:

16-21

BSH 11/15/07

On page 9, beginning lines 1,8-28

For example, messages between the switch controller SWC-A 310<sub>A</sub> and the primary head-end controller 130<sub>1</sub> may be sent bi-directionally via signal path 317<sub>A</sub>, through the first Ethernet switch 144<sub>1</sub>, and then through signal path 119<sub>1</sub>. Similarly, messages between the switch controller SWC\_B 310<sub>B</sub> and the primary head-end controller 130<sub>1</sub> 119<sub>4</sub> may be sent bi-directionally via signal paths 317<sub>B</sub>, through the second Ethernet switch 144<sub>2</sub>, and then through signal path 119<sub>2</sub> paths 119<sub>4</sub>. Likewise, communications between the secondary switch controller SWC-B 310<sub>B</sub> and the secondary head-end controller 130<sub>2</sub> may be provided in a similar manner, as shown in FIG. 1.

וטופוניו אפב

On page 11 beginning lines 17-29:

During operation, in an exemplary embodiment I/O port 1 320<sub>1</sub> pings I/O port 2 320<sub>2</sub> first, then 5 milliseconds later pings I/O port 3 320<sub>3</sub>, then 5 milliseconds later pings I/O port 4 320<sub>4</sub>, and continues in this manner through I/O port 16 320<sub>16</sub> before repeating the cycle, i.e., in a "round robin" process. [[..]] In addition, the other I/O ports 2 through 16 320<sub>2</sub> through 320<sub>16</sub> are likewise pinging one another in a similar manner. Furthermore, a few fractions of a millisecond after each ping is sent, 16 acknowledgements are being sent from the recipient I/O port 320 back to the originating I/O port. Once an I/O port has consecutively pinged the other 15 I/O ports, a cycle has been completed. Thus, during each 5-millisecond interval, 16 individual pings and corresponding acknowledgements are being passed through the switch matrix 306<sub>A</sub> of the primary switch controller 310<sub>A</sub>. Therefore, during the course of one complete cycle (i.e., 75 milliseconds) the switch matrix 306<sub>A</sub> functions as a 16x16 array, and will have transferred 240 pings and 240 acknowledgement signals.

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09/540,178

USSN 09/540,178 Page 3

follows:

## IN THE SPECIFICATION

Please replace the following paragraphs with the amended paragraphs as

B5H 11/15/07

18 24

On page 12, lines 1/9-2/5:

N

In step 714, the secondary switch controller  $310_B$  reads the status registers 424 of the I/O ports 320 to determine if some (e.g., at least two) or all of the I/O ports 320 have asserted an error bit in their respective status registers 424. If the determination is affirmatively answered, the [[The]] method 700 then proceeds to step 716, where the secondary switch controller  $310_B$  assumes the primary switch controller  $310_A$  (e.g., switch matrix  $306_A$ ) is inoperable. Thus, in step 716, the secondary switch controller  $310_B$  will initiate a switchover and thereby serve as the primary switch controller for the switch 113.

## On page 14, lines 11-17:

22

In step 814, the secondary switch controller 310<sub>B</sub> reads the status registers 424 of the I/O ports 320 to determine if some (e.g., at least two) or all of the I/O ports 320 have asserted an error bit in their respective status registers 424. If the determination is affirmatively answered, the [[The]] method 800 then proceeds to step 816, where the secondary switch controller 310<sub>B</sub> assumes the primary switch controller 310<sub>A</sub> is inoperable. Thus, in step 816, the secondary switch controller 310<sub>B</sub> will initiate a switchover and thereby serve as the primary switch controller for the switch 113.

## On page 16, lines 13-19:

In the event that the switch controller [[320]] 310 fails, all of the video sessions being executed and streamed to the subscribers would be lost. Therefore, by adding a secondary switch controller 310 to the switch 113, the I/O ports 320 have an alternate switch controller available to provide an alternate inband signal path 315 between the switch controller 310 and I/O ports 320. Accordingly, if one switch controller fails, then utilizing a redundant switch controller 310 may avert a single point of failure occurring at the switch 113.